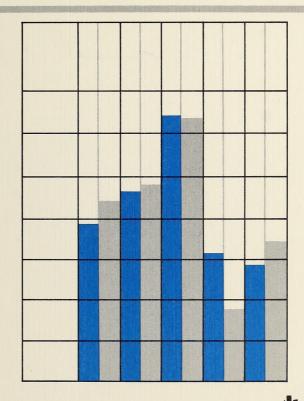
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# CREATING A TECHNICAL REPORT



1986 Edmonton FORESTRY, LANDS AND WILDLIFE

# **CREATING A TECHNICAL REPORT**

1986 Edmonton



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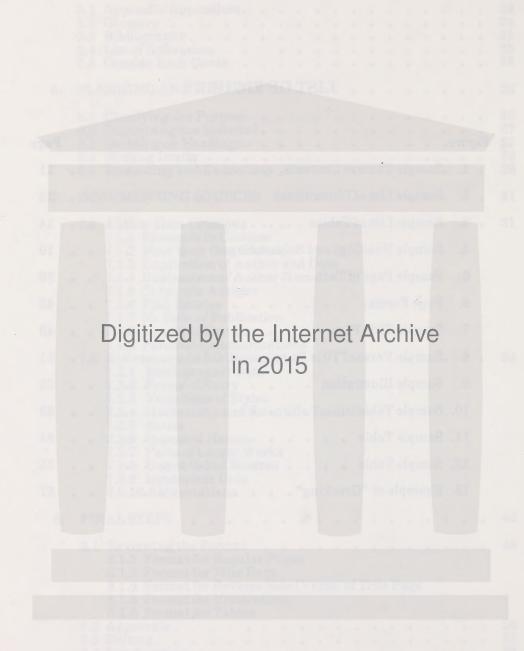
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# 1. INTRODUCTION

Many Alberta Energy/Forestry, Lands and Wildlife publications are technical. Their subject matter is specialized and often confronts writers and support staff with special problems such as tables and citations.

Technical publications (which include technical reports, manuals and consultant reports) are intended for a limited but significant readership whose opinions and criticisms represent the views of specialists and experts.

The guidelines and standards which follow are intended to meet the expectations of a specialized public which requires accuracy, consistency and careful attention in the organization of technical subject matter.

The main concerns of <u>Creating a Technical Report</u> are the format and organization of technical publications. It also discusses such topics as abbreviations, numbers, figures, tables and the proper documentation of sources and suggests how a writer can plan and write a technical publication. This guide thus supplements but does not replace the standard authorities on good writing and effective communication, an example being the <u>University of Chicago Style Manual</u>.

The two most important reasons for guidelines contained in this publication are to ensure consistency in style for all department publications and to maintain standards of reporting scientific work that will be understood and accepted well beyond this department. However, some acknowledgment of the implications of word processing technology must be made. Because of some word processing programs used, it may not be realistic to conform to all the editing or format guidelines. In such cases, the more important criterion will be acceptance of the substance of the scientific information.

# 2. STANDARDIZING THE ORDER OF ELEMENTS

Every book-length publication is made up of many elements (Table 1). Many of these are basic to every technical publication published by the departments. Other elements are necessary depending on the specific publication -- its complexity, purpose, readers or perhaps its traditional form.

What is not flexible is the order in which the elements appear. This must be the same for all publications.

Every publication can be divided into three general areas: preliminary, main and back material.

Table 1

PUBLICATION ELEMENTS AND THEIR ORDER

		equence rder	Element	Page to Start on
Preliminary	*	1	Front Cover	
material		2	Important disclaimer	r.h.
maveriai	*	3	Title page	r.h.
	*	4	Reverse side (verso) of title page	l.h.
		5	Covering letter or letter of	1.11.
		9	implementation	r.h.
		6	Abstract or executive summary	r.h.
	*	7	Table of contents	r.h.
		8	List of illustrations	r.h.
		9	List of tables	r.h.
		10	Foreword	r.h.
		11	Preface	r.h.
		12		r.h.
		13	Acknowledgments List of abbreviations;	1.11.
		19	conversion chart	r.h. or l.h.
		14	List of crucial definitions	r.h. or l.h.
	-	14	List of crucial definitions	1.11. 01 1.11.
Main		15	Half-title pages <sup>a</sup>	r.h.
material	*	16	Introduction	r.h.
	*	17	Written text, divided into	a new r.h. or
			chapters with subdivisions	l.h.
		18	Illustrations (line drawings,	
			photographs, graphs, maps)a	
		19	Tablesa	
		20	Appendix/Appendices	appendix 1:
			TT TT	r.h.; there-
				after r.h. or
				1.f.
Back material		21	Glossary	r.h
		22	Bibliography	r.h
	*	23	List of references	r.h
		24	Back cover	

<sup>\*</sup>Basic elements which should be in every technical publication are indicated with an asterisk.

 $<sup>^{\</sup>rm a}Elements$  15, 18 and 19 do not follow an order but are intermixed with the text.

#### PRELIMINARY ELEMENTS AND 3. THEIR PURPOSE

The preliminary material prepares the reader for the publication.

# \*3.1 Front Cover

The front cover provides a special identity to a publication. It also establishes similarities with all Alberta government publications, all technical publications, and other publications in the same set or series.

For these reasons the front cover needs:

- A good short title, complete and as it appears on the title
- The Alberta government logo, with the name(s) of the issuing department(s) and, if appropriate, divisions, branches and sections
- A visual link with all other publications, as recommended by the division and Communications
- An illustration or number ("No. 3") linking the publication with others in the series or set

  For serials with covers, the International Standard Serial
- Number (displayed in upper right-hand corner)

#### Omit from the cover:

- Author's name
- Publication number
- International Standard Book Number

<sup>\*</sup>Basic elements essential to all technical publications are indicated with an asterisk.

# 3.2 Important Disclaimer

A disclaimer is a statement dissociating the publisher (that is, Energy or Forestry, Lands and Wildlife) from the author. A disclaimer appearing as the first element after the front cover means it is imperative that the reader realize the views expressed are not necessarily those of the department. It further implies, by its prominence, that the views, conclusions or recommendations may in fact conflict with department policy or actions.

Disclaimers are usually customary in consultant reports, studies written under contract, theses and other similar studies published by the department. In most of these cases, the need for a disclaimer is served by means of a statement within the preface or a note on the verso (reverse) of the title page.

# \*3.3 Title Page

#### 3.3.1 What to Include

More information is needed on the title page than on the cover. The title page -- not the cover -- is the "authority" referred to when cataloguing the publication, citing it as a source and including it in a bibliography. (For the format of the title page, see Section 8.1.2.)

A title page is essential in all reports, manuals and booklets and should provide all of the following:

- Full title and subtitle
- Series title
- Author(s). Affiliations/job titles are not necessary unless of benefit to the reader.
- Publisher(s). The publisher statement includes the Alberta government logo (except for most working documents), the department(s), division(s) and, when appropriate, branch(es).
- Place of publication (for example, Edmonton)
- Year of publication. (This may differ from the date the study was completed or, if a revision, the previous date of publication). Sponsor, if different from the publisher, as might be the
- case with task forces, committees and conferences

Committee reports should include the full name of the committee and, if appropriate, the names of the chairperson and/or report editor.

#### 3.3.2 Choosing a Title

The title is the most important element of the preliminary material, yet often is composed without enough planning.

A title has a big job to do. It must accurately capture the topic of the publication and how it has been treated, attract the reader, give the publication individuality, and contain complete enough information for cataloguers and researchers.

The following guidelines will help when deciding on the title:

- 1. Give the report one title. It avoids confusion if the title on the cover and the title page match exactly.
- 2. Give publications in a series a single title, using the same words and word order for all issues or updates. Avoid "Third Review of . . . " for one issue and "Annual Review, January December 19-- . . . " the next.
- 3. Let a subtitle help. The main title can be short and used for everyday references, while the subtitle clarifies the content.

Example: <u>Tri-Creeks Watershed: A Study into the Effects of Logging on the Physical, Chemical, and Biotic Conditions of Three Alberta Eastslope Streams.</u>

- 4. Use the key words of the topic right in the title.
- 5. Be alert to words that have different meanings for different disciplines.

For example, someone from industry, a forester and a teacher would envision a very different publication from the title Resource Handbook.

6. Avoid starting with an overused word or phrase such as "Report on . . . ", "Guidelines to . . . ", "Alberta's . . . ", "Investigation into . . . ". Such titles bury a publication in alphabetical listings and catalogues.

On the other hand, if it is preferable for several titles to appear together, choose a common element for the first part of the title. Example: Integrated Resource Plan: Blackfoot Grazing Reserve.

7. Use a date in the title only when it refers to the content. Never use the date of publication as part of the title. Forestry Products Imported into Alberta: December 1979 is misleading. Its publication date could be mistaken to mean the products were imported during December, 1979.

# \*3.4 Title Page Verso

The title page verso (the reverse side of the title page) is used as a catch-all page, stating:

Publication numbers

• Reference information for the reader

• Publishing history of the publication

For the format of the title page verso, see Section 8.1.3.

#### 3.4.1 Publication Numbers

Numbers. The Publication Policy and Guidelines requires that every publication and internal report have a publication number. The publication number assists in recording the publication or report and in providing appropriate access to its information. Department publication numbers are assigned by the Editing Section (427-8636).

ISSN and ISBN Numbers. The International Standard Series Number (ISSN) and International Standard Book Number (ISBN) are unique identifiers used in computerized cataloguing. Every publication is required by international and federal-provincial agreement to carry an ISBN and/or ISSN. The Editing Section assigns International Standard Numbers in co-operation with the National Library of Canada.

# 3.4.2 Publishing History

It is useful for a publication to carry a short publishing history which summarizes in point form:

 Details on its evolution. This is important for a publication such as a plan for which several similar documents may have been produced during its development.

Example: Preliminary report of the same title -- 1976 Input documents: Biological Inventory of Swan Study Area -- 1978 Land Inventory of Swan Study Area -- 1978

Final Report -- 1979

Details on the printing history. This is important when a
publication has been revised or reprinted under the same
title. Without this information, it is difficult for readers
to know what versions they have.

Example: First printed 1972

Reprinted with minor corrections 1974

Revised 1976 Reprinted 1980

(The reader thus would know that the information can be no more recent than the 1976 revision.)

 Any previous title, if the report was retitled upon revision.

#### 3.4.3 Copyright Statement

Copyright in Canada is acquired simply by the act of creating an original work. The author holds the copyright unless he or she was employed to write the work in question. Copyright of government publications and reports is vested in the Crown.

Although basic copyright protection is thus assured automatically, the department may also wish to be able to establish proof of copyright ownership. Such proof is established by registering the copyright of a manuscript or a publication with the Copyright Office of Consumer and Corporate Affairs Canada. Copies of the publication are not required by the Copyright Office, but as with all Canadian publications, they must be deposited with the National Library of Canada.

A statement of copyright is not required by the Canadian Copyright Act. However, in order to retain copyright protection in countries such as the United States, statement of copyright is necessary.

A copyright statement includes three elements: a small c in a circle or the word "copyright", the name of the copyright holder (in the case of government, the Minister), and the year of publication. In books and similar publications the copyright statement normally appears on the title page verso.

Arrangements for registration are made through the department's communications office.

#### 3.4.4 Reference Information

Include on the title page verso any information the reader would appreciate knowing about the publication, such as:

• Where to write for an additional copy of the publication.

 Other titles in the series or other publications on the same topic, and where to get copies or where to view them. (This is worth including if you are encouraging readers to seek these materials, but only of use to readers if the materials can be found.)

 Where the publication may be viewed, if copies are not available (such as in the Energy/Forestry, Lands and

Wildlife Library).

• The address and telephone number of the branch issuing the publication.

# 3.5 Covering Letter or Letter of Implementation

A covering letter formally presents the report and its results to the person(s) who initiated the study. It should be signed by the person (author, chairman of the committee, etc.) responsible for producing the report (see also 3.10, Foreword).

The covering letter should preferably:

• Identify the report by title

• Tell when the report or study was assigned

Tell why the report or study was necessary

Be dated

A letter of implementation is a traditional element in certain publications such as plans by which the document is authorized as official and in effect from the date shown.

A letter of implementation needs:

• Title of publication

Authorizing signatures

Positions or titles of authorities

• Effective date(s)

# 3.6 Abstract or Executive Summary

The abstract or executive summary, an element recommended for technical reports, serves many purposes. It briefs a reader about the report, helps a potential reader decide whether the entire report should be read, and gives a review of the key points to someone who has previously read the report. It is also useful for those creating bibliographies or cataloguing the publication.

Whether you use an abstract or an executive summary depends on your readership and distribution needs. An abstract, directed toward the general reader, is generally shorter and is an integral part of a publication. An executive summary, intended for

management-level review purposes, must be able to stand on its own since it is often distributed independently of the publication.

An informative abstract is recommended rather than one simply describing the topic covered in the publication. Informative abstracts and executive summaries mention:

> All the key words and main points of the publication -reflecting the same emphasis they receive in the publication

> • Major findings and new information generated by the

publication

- Recommendations (or a page reference if the recommendations are lengthy)
- Key words (no more than 10) that reflect the content of the publication (an aid for indexing or cataloguing)

Omit from the abstract and executive summary:

Background and historical information

• A "state-of-the-art" review

Information not mentioned in the report

# \*3.7 Table of Contents

The table of contents (Figure 1) helps a reader find information, provides an overview of how the topic is treated and provides a summary of the publication in outline form.

In a table of contents, list:

• Parts (if any)

• Chapter headings, starting with the introduction, exactly as they appear in the text, with the page numbers

A-level subheadings of the chapters in the text, with the

page numbers

Back material, such as appendix/appendices and the list of references, with page numbers

Minor-level subheadings may also be listed, either with or without page references. For lengthy or complex publications, a detailed table of contents can be given with the half-title page which introduces a new part or with the beginning of a new chapter. In this case, the main table of contents would give only main chapter subheadings.

Omit from the table of contents:

 Preliminary material which precedes the introduction (elements 1 to 15)

2" 5cm

# TABLE OF CONTENTS-

		(3 lines of space)	Centre over the numbers
C	Chapter Titles in Capital Letters		Page
	1 INTEROPLICATION	(1 line of space)	_
	1. INTRODUCTION	(2 lines of space)	5
	2. ROUTE SELECTION PROCESS .	(1 line of space)	11
	2.1 Multidisciplinary Approach 2.2 Setting Objectives for Componen	ts	11
	7 Title -style capitalization 3. PHASES OF THE ROUTE SELECTION	ON DDOCESS	Align
	3. PHASES OF THE ROUTE SELECTI	ON PROCESS	• • • 19 numbers by last digits
	4. METHODOLOGIES FOR ROUTE SI	ELECTION PROCESS .	26
	4.1 "Ad Hoc" Committee Method . 4.1.1 Method 4.1.2 Advantages		27
	4.1.3 Disadvantages 4.2 Overlay Method 4.2.1 Method 4.2.2 Advantages		34
	4.2.3 Disadvantages 4.3 Impact Checklist Method 4.3.1 Method 4.3.2 Advantages		38
	4.3.2 Advantages 4.3.3 Disadvantages  Align periods vertically		Align dots vertically
	5. ROUTE SELECTION USING INTEG	GRATED DATA BASE .	47
1 ½ inches 3.8 cm	6. CONCLUSION		65
	APPENDICES	• • • • • • • • •	67
No less than	LIST OF REFERENCES		74
1 inch - 2.5 cm	Fig. 1. SAMPLE TABLE OF CONTEN	ITS	Dots stop 3 spaces before the largest number

#### 3.8 List of Illustrations

The list of illustrations (Figure 2) complements the table of contents in style and purpose. Whether or not a list is needed depends on how many figures there are and how significant they are to the publication or report. For example, if key findings are presented as graphs, even if there are only two, a list should be prepared. On the other hand, a publication using many photographs mainly to break up the pages of text would not require a list of illustrations.

Include in the list of illustrations:

- Captions, with page numbers. If a sentence of explanation follows the caption, it is omitted from the list of figures).
- Categories of figures used (maps, graphs, etc.)

Captions, especially when in sentence form, can be shortened in the list of figures.

#### 3.9 List of Tables

The reasons for including a list of tables (Figure 3) are the same as for the list of illustrations. It is important to list the titles of the tables exactly as in the text with the page numbers on which the tables appear.

# 3.10 Foreword

The foreword is similar to the preface -- both are statements about the publication -- but is written by someone other than the publication's author. Although uncommon in technical publications, a foreword may be used to include remarks from someone such as a supervisor or director. (See also 3.5, Covering Letter or Letter of Implementation.)

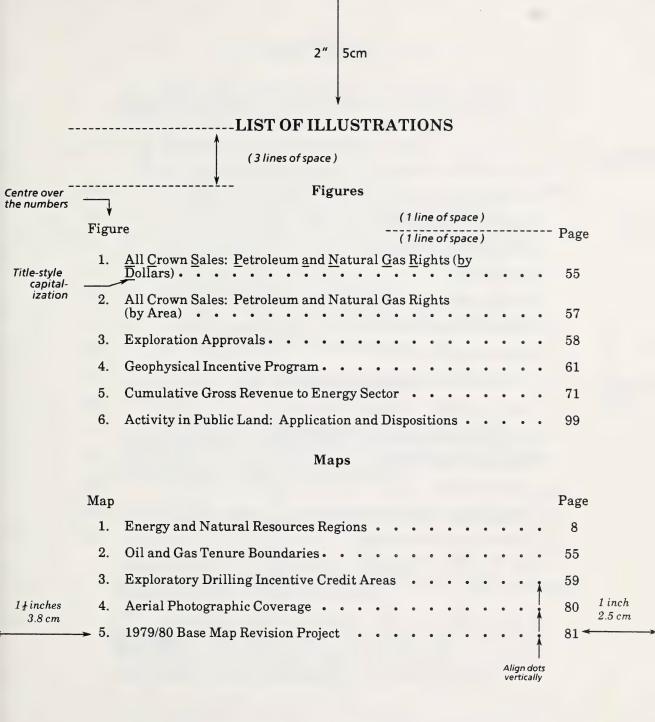


Fig. 2. SAMPLE LIST OF ILLUSTRATIONS

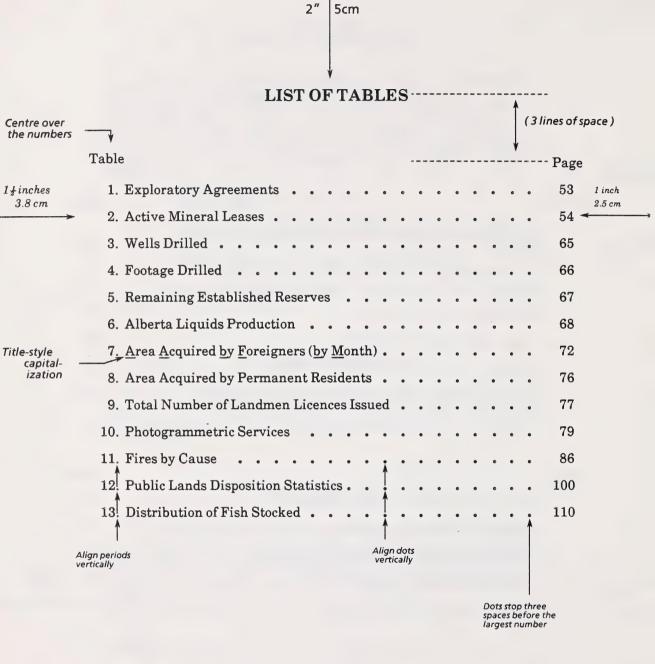


Fig. 3. SAMPLE LIST OF TABLES

# 3.11 Preface

The preface, written by the author, is an explanatory statement about the publication itself but is not about the topic of the publication.

A preface can include any of the following:

Why the publication has been written, or revised, or why
it is being published at this time

 Acknowledgment of previously printed publications or studies to which the present publication is indebted

 Acknowledgment of previously published materials, such as photographs, used extensively within the report and making such an important contribution that more than a credit line is warranted

• How the author(s) came to be involved with the study

Why the approach used was chosen

 Acknowledgment of help with research, the writing of the report, or its production (see also 3.12, Acknowledgments)

Acknowledgment of funds or sponsors

## 3.12 Acknowledgments

If the only explanatory notes to be made are acknowledgments, the preface can be omitted and substituted by an acknowledgment. Acknowledgments should be short. In most cases, the assistance and co-operation of department staff in the regular course of duties do not need to be acknowledged.

# 3.13 List of Abbreviations and Conversion Chart

A list of abbreviations as part of the preliminary material allows extensive use of abbreviations throughout the report. This listing is an alternative to spelling out the term on first citing followed by the abbreviation in parentheses.

Publications should be written in SI (metric) units or both SI and imperial units. (Agricultural land measurements should be given in both metric and imperial equivalents.) A conversion chart is an alternative to using double units throughout the report. It also helps a reader not yet comfortable with conversion to SI units.

# 3.14 List of Crucial Definitions

If you are coining new terms or using a term in an unusual sense, or if a special definition of certain terms is especially important, the terms with their definitions can be listed in the front matter of the publication.

Definitions, as an element, is a selective list of only the key definitions. If it is expanded into a comprehensive list, it becomes a glossary and appears in the back material.

# 3.15 Half-title Pages

Long and complex publications which have been organized into major segments ("parts") are introduced with half-title pages. Generally, only the part number and heading are indicated on the half-title pages, although it is possible to add a short contents listing (see 3.7, Table of Contents).

# 4. MAIN ELEMENTS AND THEIR PURPOSE

The actual text of a publication begins with the introduction (generally considered as Chapter 1) and continues with basic units generally referred to as chapters. Each chapter may be subdivided into sections, and may also contain illustrations and tables.

#### \*4.1 Introduction

The introduction is the first chapter in the body of the text. It gives the reader background information necessary to understand the publication, such as:

- Summary of the topic
- Historical overview
- Summary of other studies or related research (sometimes it is more appropriate to supply background material in an appendix)

More often, the introduction briefly describes the study itself, such as:

- Objectives
- Description of the area of study
- General methods used

A long introduction can be subdivided with headings and can also include illustrations and tables. For booklets and similar short publications the introduction may be only a few paragraphs long.

# \*4.2 Written Text

The main material or "body" of a publication comprises the written text and the accompanying illustrations and tables. (For suggestions on writing the text, see Chapter 6, Planning and Writing.)

For most publications, the text is divided into chapters, which in turn may be further subdivided. The subdivisions, arranged to indicate a decreasing order of textual priority, move from general to particular. The headings which indicate this hierarchy are referred to as A-level (indicating the section is second in logical importance to chapters), B-level and, the most specific in detail, C-level.

Occasionally, the chapters of a publication are organized into larger units called parts.

The headings used to indicate parts, chapters and subdivisions should show the reader the decreasing order of emphasis (Figure 4):

- Part headings are on half-title pages, in all-capital letters, centred on the page in an inverted pyramid.
- Chapter headings are in all-capital letters, centred in an inverted pyramid, starting approximately two inches from the top of the page and followed by at least two lines of space before the text continues.
- A-level subheadings are in capital and small letters, all underlined and centred in an inverted pyramid, separated by at least two lines of space from the preceding text and followed by at least two lines of spaces before the text continues.
- B-level subheadings are in capital and small letters, all underlined, starting at the left margin and followed by at least one line of space before the text continues.
- C-level subheadings are in capital and small letters, all underlined, followed by a period, starting at the left margin, separated by at least one line of space from the preceding text and followed immediately with the continuing text.

Parts, chapters and subdivisions in most technical publications are also numbered in a way which reflects the same hierarchical order as the heading styles (for example, the first subdivision in Chapter 1 would be numbered 1.1; the next within that subdivision, 1.1.1).

# 4.3 Illustrations

An illustration presents information too detailed for words. It can also reinforce a key point. Illustrations include line drawings, photographs, graphs and maps.

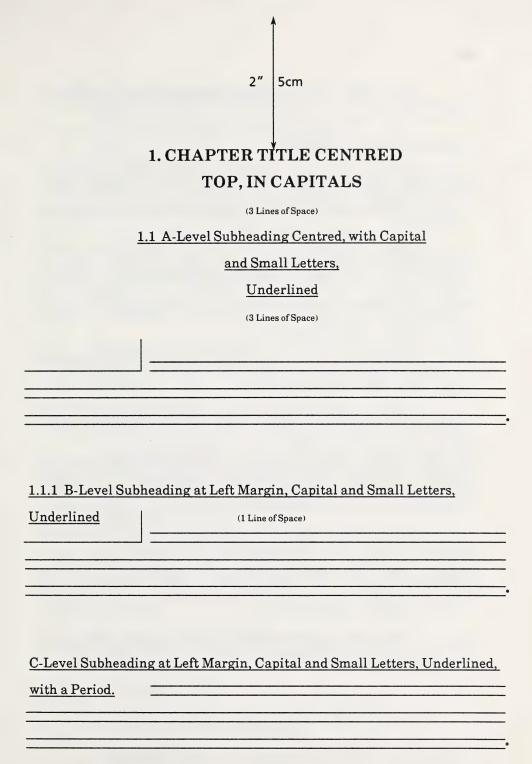


Fig. 4. SAMPLE HEADINGS AND SUBHEADINGS

Illustrations need the same consideration and planning as the written text. For the format of illustrations, see Section 8.1.4.

#### 4.3.1 Selecting Illustrations

<u>Line Drawings</u>. Examples of line drawings are flow charts, schematics, diagrams, plans and illustrative sketches. Sketches may be used simply for adding visual interest to a page. Drawings have the benefit of showing only the important details and eliminating the unessential.

<u>Photographs</u>. Photographs are convincing illustrations because of the sense of realism which they convey. However, unless a photograph is of excellent quality and the point you are trying to make stands out from the rest of the detail, a photograph is not necessarily a good choice. However, a photograph which is unsatisfactory for publishing may still prove valuable to an artist who can make a drawing from it.

The use of color photographs in technical publications is usually prohibited by the high cost since such publications are generally printed in small quantities.

Public Affairs Bureau photographers are available for assignments. Inquiries should be made through the Public Affairs officer assigned to your division.

<u>Graphs.</u> Because graphs present numerical information without precision, they are most suitable for comparisons, relationships, trends or distributions. There are several styles of graphs to consider: pie, curve, column, bar and pictorial.

The visual message of your graphs should be obvious at a glance. Choose the best style and scale to give this message.

<u>Maps</u>. Maps relate data to locations. To present this as clearly as possible, the base map you start with should be the most suitable and the simplest. As with any good illustration, the point to be made through the map should be obvious.

Maps might require color to present complex information. Screens and cross-hatching are methods that can be used to avoid the expense of full color.

#### 4.3.2 Writing Captions and Legends

Unless used simply to add visual interest, an illustration requires a caption. The caption should include:

- Figure number
- Title and/or
- Sentence of explanation

Any one of the following examples are acceptable:

#### Fig. 1. IDEALIZED RANDOM CURVE

Fig. 1. IDEALIZED RANDOM CURVE. The trend for the next five years is clearly visible.

Fig. 1. The trend for the next five years is clear from this idealized random curve.

A caption may be replaced by the legend in a map, but the map still needs to carry a figure number outside its border. Better yet, using both a caption and a legend would provide the reader with more information.

#### 4.3.3 Acknowledging Credits

Permission is required for using illustrations on which copyright does not belong to the Crown in right of the Province of Alberta or to which a third party (such as the subject of the photograph) has release rights. It is your responsibility as an author to secure the necessary permissions and to credit the source(s) in the manner requested.

When material is not copyrighted, it is still good policy to acknowledge credit by means of a statement that permission has been obtained (for example, "Printed with permission of ..." or "Courtesy of ..."). Such credits, together with the name of the illustrator or photographer, may appear with the illustration or in the acknowledgments.

Even if you are revising data from another source in your illustrations, or the illustration is copyrighted by the Crown in right of the Province of Alberta, it is a good idea to credit it.

#### Examples:

SOURCE: Adapted from Baker 1978, Table 3, p. 62. SOURCE: Shank 1976, p. 12.

The credit lines in the examples just given correspond to entries in the list of references where the reader can get full details.

#### 4.4 Tables

Tables replace written text when data is given or compared. Unlike graphs, a table presents precise numerical information.

A table must make a point. The unity of the table, no matter the number of columns involved, must be evident in the relationship of the columns and the theme of the table.

For the format of tables, see Section 8.1.5.

#### 4.4.1 Selecting a Title

The title should briefly identify the table and should not repeat the column headings. A subtitle may also be useful.

Example: TIMBER PRODUCTION
In Thousands
of Dollars

#### 4.4.2 Stub

The items listed down the left-hand side of the table to identify the rows make up the stub. You should be consistent here by:

(1) Treating comparable items in a similar manner.

Example: Area covered (hectares)

Distance flown (kilometres) Photographs taken (number)

not

Area covered (hectares) Kilometres flown Number of photographs

(2) Referring to an item in all tables the same way.

Example: Air photos or Aerial photographs (not both)

- (3) Using the same order for listing items when tables have similar stubs.
- (4) Being consistent in abbreviations, symbols and punctuation.

#### 4.4.3 Headings

The items across the top of the table that identify the columns are headings. They should be similar to each other in style and length. Abbreviations and symbols are appropriate in tables, but they may need to be explained in the notes at the foot of the table.

A heading is generally not necessary for the stub. When two or more columns have the same heading, a horizontal line (or "banner") must indicate the columns included under the heading.

#### 4.4.4 Footnoting Tables

There are three kinds of footnotes for tables. They should appear in the following order:

1. The source note, a credit line similar to that required for an illustration.

2. A general note, which is a comment applying to the whole table. A note referring to the title of a table is always a general note since it concerns the whole table.

3. Specific notes, which match the superscripts marked on the table. In tables with numbers, small letters of the alphabet for superscripts may avoid possible confusion. Footnoted items are labelled consecutively as the table is read: left to right, top to bottom.

Footnotes to a table apply to that table only. They appear immediately below the table itself, and are not mixed in with the footnotes of the written text. Each table numbers its footnotes beginning at 1 or a.

# 5. BACK ELEMENTS AND THEIR PURPOSE

The back material plays a support role and supplements the body of the publication. All elements in the back material are optional, depending on the nature of the specific publication.

# 5.1 Appendix/Appendices

The appendix, first element of the back material, is the place for material not essential to the written text but relevant to the report.

The following could appear as appendices:

- Elaboration on tables found in the text
- Tables relevant but not essential to the text
- Background information
- Notes on the study method
- Samples of forms used or letters sent
- Complete results from surveys
- Additional illustrations
- Formulas used in calculations

Each item need not be a separate appendix. However, if material becomes extensive, it should be arranged into categories with each category made into an appendix.

Multiple appendices are numbered consecutively (Appendix 1, Appendix 2) and titled.

References should be made at the appropriate spots within the rest of the publication to the appendices.

# 5.2 Glossary

A glossary is justified when words, terms and phrases are not familiar to the reader (remember your intended audience), are not defined in the preliminary matter or in the text itself, or are defined in the text but are so extensive in number that it is useful to collect them in one place.

Entries in the glossary should be arranged alphabetically and be consistent in typography, capitalization and punctuation. Each definition should follow similar sentence structure and punctuation.

# 5.3 Bibliography

A bibliography lists books, articles and other sources providing further information on the subject. It does not duplicate the sources used to prepare the reports which are cited in the references. Generally, bibliographies are optional for technical publication.

A bibliography uses the same format as the list of references.

### 5.4 List of References

A list of references provides the full bibliographical information a reader needs to locate a copy of the works you have mentioned, footnoted or cited. A typical entry includes:

- Author (this may be a corporate author or an editor)
- Date
- Title
- Edition
- Series title and number
- Place of publication and name of publisher
- Publication numbers

Entries are arranged alphabetically by author and, when necessary, by title. Although there are a number of acceptable styles for lists of references and bibliographies, it is always necessary to provide full, accurate bibliographical data and to remain consistent in style.

If you use abbreviations, verify that they are standard and be sure they are familiar to your readers (see Section 7.2, References and Bibliography).

# 5.5 Outside Back Cover

For publications printed with covers, it is required by international agreement that the International Standard Book Number be printed in the lower right-hand corner of the back cover.

# 6. PLANNING AND WRITING

As with good writing in general, a technical publication is selective in its content -- by including only the material that helps meet the purpose.

# 6.1 Clarifying the Purpose

The purpose of a publication is to communicate specific information to certain readers. If you are unsure of the purpose of the publication, you would be wise to delay writing until you can give specific (not vague) answers to these questions:

- 1. Of all the facts and ideas collected, which are essential? Which are the key points to be understood by the reader? Which conclusions should be remembered by the reader?
- 2. Who are the intended readers? What is their knowledge of the subject? What is their likely background knowledge? What is their attitude toward what will be said? (Skeptical? Enthusiastic? Disinterested? Hostile?)
- 3. Is there something besides communicating facts that the report must do? (Convince? Justify? Act as a working document? Recommend something? Inform about progress? Supply facts for a permanent record or series?)

Once the purpose has been pinpointed, the information, the illustrations and the tables can be chosen selectively and you will also know whether to write on a general or technical level.

A good technical publication is not a record of everything known in the order it occurred to the author. A planning stage is needed before writing begins.

# 6.2 Organizing the Material

The information you have selected from what has been collected needs to be organized and presented logically.

The organization and subsequent headings for the body of the report may be demanded by the subject area. For example, the body of a scientific paper customarily includes the following:

- Description of study area
- Methods
- Results
- Discussions
- Conclusions
- Recommendations

Or a pattern may already have been set by your division or the department through previous titles in a similar series or set of publications.

The following suggestions may also help:

<u>Chapters</u>. Most topics appear to divide naturally into major units or chapters. However, these should not be accepted without questions. Are they of approximately equal significance and length? Do any overlap in content? What is the best order in which to present them, considering the purpose of the publication? (Chronological? Decreasing order of importance? Inductive line of reasoning?) Which chapters require subdivisions? Which chapters should be grouped together?

<u>Subdivisions</u>. Chapters are not just subdivided in order to break up the copy. Subdivisions take the discussion from the general to the most specific -- from the chapter in general to the "C-level" heading.

Using the tentative headings for the chapters and subdivisions, make an outline of the publication. Is the presentation balanced? Does all the material fit and develop logically? It is much easier to juggle an outline than to rearrange pages after you have begun writing.

Subdivisions should be uniform in detail for each level of heading. It is not necessary, however, to subdivide every chapter; nor subdivide every chapter down to the same level.

<u>Parts</u>. The organization of a publication may be improved by creating larger units which group chapters into two or three main parts of equivalent significance and length. Parts are best used for long and complex publications.

# 6.3 Deciding on Headings

A heading is a title for a part, chapter or subdivision. Like any title, it should accurately reflect the content and treatment of what follows. Another way of checking the adequacy of your headings is considering whether, when brought together to form the table of contents, they present a balanced and accurate outline of the publication.

Headings should be polished by matching their tone and style for each similar level.

Example: Organization

Development

Revision

<u>or</u>

Organizing the Material Developing the Theme Revising the Copy

# 6.4 Writing Drafts

Once the material has been selected and an outline established, it is time to begin writing. Your report has a better chance of being understood by the reader if you:

- 1. Remember your purpose ("What am I trying to say?")
- 2. Write with the reader in mind.
- 3. Use simple language, if at all possible, and avoid jargon. (Jargon limits both the effectiveness and life span of a publication.)
- 4. Decide which minor details should be omitted or relegated to an appendix.
- 5. Be prepared to rewrite and rewrite again.

Any publication draft can benefit from having someone not as close to the material as yourself read it and comment. It is recommended that your professional peers review the contents of the draft. At the same time, all publications which will be available to the public must be reviewed by the editing services of the department. The editors will recommend style changes, query problems of interpretation and check that the format and presentation meet guidelines.

# 6.5 Footnoting and Endnoting

Crediting a source and providing supplementary information are two reasons for footnoting and endnoting. In technical publications, the author-date style of citing a source will eliminate the need for most footnotes. Examples and guidelines for crediting a source are given in Chapter 7, Documenting Sources.

Nevertheless, notes at times will be necessary for:

Clarifying a definition

Commenting on material without interrupting the flow of the text

Explaining a citation

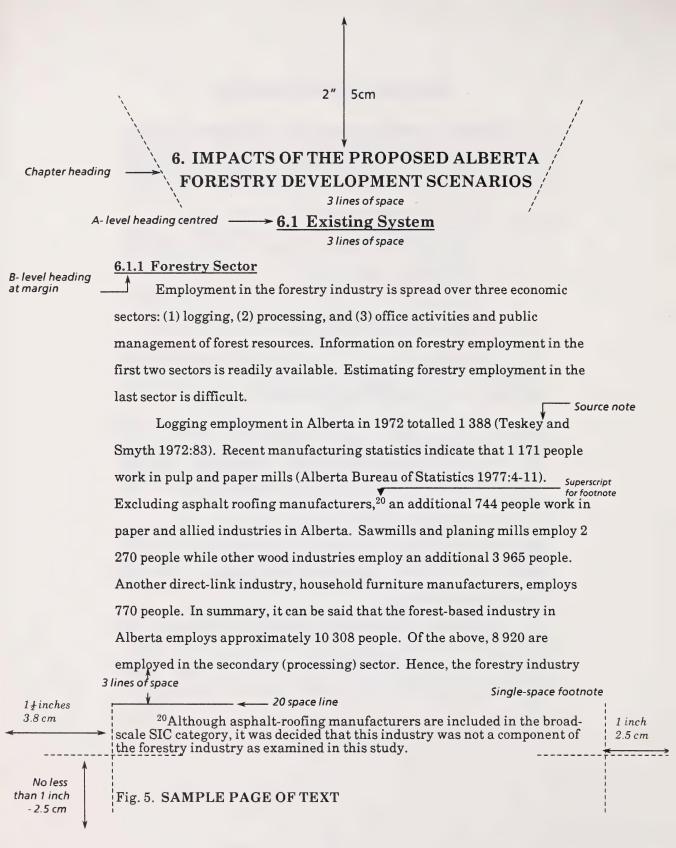
- Giving more detailed information than can be included in the text
- Providing a dissenting or supplementary point of view
  Supplying supplementary bibliographical information

Footnotes are provided at the bottom of the page (Figure 5). It is essential that the same style be used consistently throughout a publication. Authors should also remember that footnotes are cumbersome for typists and printers when designing a page.

Instead of using footnotes, a publication may provide endnotes at the end of the chapter or publication where they are entitled "Notes". When they come at the end of the publication, they appear after the appendix and before the bibliography. Although easier to format than footnotes, endnotes are less commonly used in technical publications because they are less convenient for the reader.

For both footnotes and endnotes, the note reference is indicated in the written text with superscripts. Although an asterisk is allowable, it is preferable to number notes consecutively for each chapter or for the whole publication. Always place the superscript after (never before) the word or passage to be footnoted and outside the punctuation of the text.

Footnotes must appear at the bottom of the page on which they are cited.



# 7. DOCUMENTING SOURCES

By citing other literature, authors not only acknowledge the source of an idea, fact or quotation but are demonstrating the extent of their research and their knowledge of the area of study, as well as indicating additional sources of information for their readers.

# 7.1 Author-Date Citations

The author-date citation style is commonly used in technical and scientific publications. The citation, given in the text and usually inside parentheses, provides the information needed for referring the reader to the full reference provided later in the list of references (see Section 7.2 for style rules on references).

### 7.1.1 Elements in Citation

A citation includes three elements: author, year and, when necessary, page reference. If one or more of these has already been given in the text, the remaining element(s) in parentheses is sufficient. There is no punctuation needed between author and year; the page reference is introduced with a colon.

Example: (Griffiths 1982:40)

Note that full reference entries for most citations used in the following examples are provided later in Table 2.

# 7.1.2 More than One Author

For works by two or three authors, all the authors must be indicated.

Example: (King, Grainger and Straka 1983:3)

For works by more than three authors, "and others" (or "et al.") is used after the first name.

Example: (Weaver and others 1979:17)

### 7.1.3 Duplication of Author and Date

When two citations have the same author and the same publication date, a letter of the alphabet is used to differentiate them:

Example: Heit 1967a. Heit 1967b.

The full references for the preceding examples are:

Heit, C. E. 1967a. Propagation from Seed: Part 6: Hardseedness: A Critical Factor. New York Agricultural Experiment Station, Geneva, N.Y.

Heit, C. E. 1967b. Propagation from Seed: Part 7: Germinating Six Hardseeded Groups. New York Agricultural Experiment Station, Geneva, N.Y.

### 7.1.4. Duplication of Author Name

When two personal authors have the same surname, they may be distinguished by adding the initial from the first name of one of the authors.

### 7.1.5 Corporate Authors

Government publications and similar documents produced by an agency or committee are cited by the name of the issuing organization as the corporate author. (A government is referred to by the name of the region.)

Example: (Alberta 1984:5)

When an organization has more than one element in its name, all elements in the name should be given in the reference and, if possible, in the citation. In citations and references with compound corporate names, the elements are separated with a period.

Example: (Alberta. Energy and Natural Resources 1983:35)

However, when corporate names become complex and their citations recur frequently, it is permissible for abbreviations or shortened forms to be used. The abbreviated form must provide the reader with sufficient information for easily locating the full reference in the list of references.

#### 7.1.6 Title Entries

If a personal or corporate author cannot be established, the source is cited by title. "Anonymous" or "Anon." is no longer accepted.

Example: (Evaluation of the Hardwood Resources of the O'Chiese Block: Working Condensation 1982:S-2)

When a publication has been published by an agency or organization but is not an official statement of policy, it may be cited by title.

### Example:

(Evaluation of the Hardwood Resources of the O'Chiese Block 1982)

#### 7.1.7 No Date of Publication

When a date of publication or printing cannot be established from the source being cited, it is permissible to cite simply the author (or author and title, if more than one work by the same author is being cited). It is also permissible to add "n.d." ("no date") after the author statement.

Example: (Energy and Chemicals from Wood n.d.:19)

### 7.1.8 Laws and Statutes

Citations of laws and statutes generally do not require entries in the list of references. However, the initial citation must make clear the issuing authority, year, full title and, when applicable, title and series number of compilation.

Example: Natural Gas Licence Regulations, 1962 (Alberta Regulations 242/79).

### 7.1.9 Personal Communications

Textual references to conversations and correspondence should provide the full name of the source, date and form (letter, memorandum, telephone conversation, personal interview, etc.). It may also be useful to establish the authority of the person involved and/or to describe the subject communicated. Personal communication citations are not repeated in the list of references.

Example: (S. F. Pugh, Alberta Energy and Natural Resources, Jan. 24, 1979, memorandum on conversion of petroleum royalty formula)

# \*7.2 References and Bibliography

A list of references provides the reader with full bibliographic information on each research source cited. The list also recapitulates the extent of the research involved in the publication as well as the scope of the literature considered significant for citation.

Entries in a list of references or a bibliography must be in alphabetical (and, where applicable, in numerical or chronological) order. For references, entries must also be keyed to the elements used in the textual citations (see Sections 7.1.2 - 7.1.7).

Although bibliographies and lists of references serve distinctly different purposes (see Sections 5.3, Bibliography, and 5.4, List of References), their style rules are the same. When a publication carries both a bibliography and a list of references, their styles must be consistent.

A sample list of references is given in Table 2 with examples of various bibliographic problems. The style used in the examples will need to be adapted to that chosen by the writer as most suitable for his or her needs.

# 7.2.1 Bibliographic Data

An entry in a list of references or a bibliography for a book will include as much as is available of the following data:

- Name of personal or corporate author(s) and/or editor(s)
- Date of publicationFull title and subtitle
- Series title(s) and number(s)
- Volume number or total number of volumes for multivolume works

- Edition
- Publisher
- Place of publication
- Departmental report numbers

### Example:

King, P. 1980. Review of Seed Pretreatments Required for Germination of Candidate Native Tree and Shrub Species in the Eastern Slopes of the Rocky Mountains and Foothills of Alberta. Alberta Energy and Natural Resources, Forest Service, Edmonton. ENR No. 154.

An entry for an article in a periodical will include the following data, when applicable:

- Name of author
- Year of publication
- Title of article
- Name of periodical
- Volume number and issue, year, month and number
- Pages

### Examples:

Hamilton, Angus. 1984. "LIS-90 Workshop V: Frederick, New Brunswick, March 19 - 20, 1984". <u>LRIS Newsletter</u> 5, No. 4 (July -August):5.

LSAS (Land Status Automated System) Newsletter. 1983. 1, No. 1 (Spring).

### Table 2

# SAMPLE LIST OF REFERENCES

Alberta. Energy and Natural Resources. 1984. All Management of the Eastern Slopes: Revised 1984.	Policy for Resource Edmonton. ENR No. T/38.
Energy and Natural Resources. n.d. "Coal De Alberta: Revised 1984." Forthcoming.	evelopment Policy for Publica numbe (assign
Double spacing \$ Energy Conservation Branch. 1984. Home H	
Savers, Booklet No. 5. Edmonton. ENR No.I/17- Series title and number Mineral Resources Division. 1984. Current a	
Tenure Legislation in Alberta: Working Paper. E Working Paper 1.	
Five-space dash indicates data repeated from previous corporate.  Resource Evaluation and Planning Division.  Branch. 1980. Integrated Resource Plan: Rocky Reserve. Edmonton. ENR No. T/1 - No. 2.	Resource Planning
Cloven-Hoofed Animals of Alberta. n.d. Alberta E	of publication not available nergy and Natural
Resources, Fish and Wildlife Divison, n.p.  Publication date supplied from another source	ce of publication not available
Energy and Chemicals from Wood. (1979). Alberta Resources, Edmonton. ENR No. 90.	a Energy and Natural
Evaluation of the Hardwood Resources of the O'Ch Condensation.  1982. Alberta Energy and Natura Edmonton.  Date of publication	niese Block: Working al Resources, Forest Service,
Griffiths, G.C.D. 1982. <u>Vegetation Survey and Mamountain Candidate Ecological Reserve.</u> Alberta Resources, Edmonton.	apping of the Plateau Energy and Natural
Hamilton, Angus. 1984: "LIS-90 Workshop V: Fre	ederickton, New er 5, No. 4 (July-August):5.

Entries for corporate authors

Entries by title

Entry by personal author

Entry for periodical articles

(Continued on next page)

#### Table 2 (continued)

King, P. 1980. Review of Seed Pretreatments Required for Germination of Candidate Native Tree and Shrub Species in the Eastern Slopes of the Rocky Mountains and Foothills of Alberta. Alberta Energy and Natural Resources, Forest Service, Edmonton. ENR No. 154.

Unpublished source

More than one author Dash not used because co-authors have been added

King, P., Grainger, G. and A. Straka. 1983. <u>Testing of Seed Pre-germination Treatments for Selected Native Shrub Species: Preliminary Phase</u>. Alberta Energy and Natural Resources, Forest Service, Edmonton. ENR No. T/43.

Part of larger source

Schipper, Lee. 1981. "Research Issues in Residential Energy Use in Industrialized Countries". In <u>Energy-Efficient Housing Symposium</u>. Alberta Energy and Natural Resources, Energy Conservation, Edmonton.

### 7.2.2. Forms of Entry

In cases when there is more than one author, a corporate author instead of a personal author, no author, a duplicate author and date, or no date of publication, the form of the reference or bibliographic entry is established according to the same principles as its citation (Sections 7.1.2 - 7.1.7).

Citation example:

(Alberta. Energy and Natural Resources. 1984)

Reference example:

Alberta. Energy and Natural Resources. 1984. A Policy for Resource Management of the Eastern Slopes: Revised 1984. Edmonton. ENR No. T/38.

### 7.2.3 Variations of Styles

There are a number of correct styles which can be used for references and bibliographies, any of which is acceptable providing it is used consistently throughout the publication and meets the specific objectives of the author(s). Consistency in style includes punctuation and capitalization, as well as the order in which the data are presented.

Examples of variations in style (scientific tradition):

- Griffiths, G. C. D. 1982. <u>Vegetation Survey and Mapping of the Plateau Mountain Candidate Ecological Reserve.</u> Edmonton: Alberta Energy and Natural Resources.
- Griffiths, G. C. D. 1982. Vegetation Survey and Mapping of the Plateau Mountain Candidate Ecological Reserve. Alberta Energy and Natural Resources, Edmonton.
- Griffiths, G. C. D. 1982. Vegetation survey and mapping of the Plateau Mountain candidate ecological reserve. Alberta Energy and Natural Resources, Edmonton.

# 7.2.4 Humanistic and Scientific Traditions

When deciding on the style to be used for a bibliography or a list of references, it should be remembered that there are two main traditions: the humanistic, which is also more formal, and the scientific. The main differences are illustrated in the two following examples.

Example from scientific tradition:

Griffiths, G. C. D. 1982. <u>Vegetation Survey and Mapping of the Plateau Mountain Candidate Ecological Reserve.</u>

Alberta Energy and Natural Resources, Edmonton.

Example from humanistic tradition:

Griffiths, G. C. D. <u>Vegetation Survey and Mapping of the</u>
Plateau Mountain Candidate Ecological Reserve.
Edmonton: Alberta Energy and Natural Resources, 1982.

The scientific tradition is acceptable in all technical publications. However, in formal statements such as government policies and non-technical publications intended primarily for the general public, the humanistic tradition is preferable.

With the scientific tradition, in addition to placing the date immediately after the author, it is common practice to:

• Omit the quotation marks around titles of articles, chapters and unpublished essays.

• Omit the use of italics or underlining for titles of pub-

lished works

 Use initial capital letters only on the first word in a title and for proper names

Use abbreviations

### Example:

McLean, A. 1967. Germination of forest range species from southern British Columbia. J. Range Manage. 25(5):321-322.

However, care must be taken that:

 Abbreviations used are consistent and recognized in standard authorities (this can be checked with the periodical title abbreviation authorities used by the Library)

 Style is acceptable to the particular discipline for which the publication is intended (for example, a publication intended only for biologists would be justified in using the Council of Biology Editors Style Manual available in the department library).

Abbreviations and style used are understandable and acceptable to a wider readership, if the publication is not

for a specific discipline.

#### 7.2.5 Series

When establishing a bibliographical or reference entry for a source which is part of a series, a distinction is usually made between an editorial or topical series which indicates a common subject or area of interest and a series which simply represents a publisher's or printer's printing sequence or trade number. An editorial or topic series statement comes before the publisher statement; a printing or production series statement, after the publisher statement.

In the following example, "Alberta Energy Savers, Booklet No. 5" is the editorial or topic series statement; "ENR No. I/17 - No. 5" is the publisher's series statement:

Home Heating. 1984. Alberta Energy Savers, Booklet
No. 5. Alberta Energy and Natural Resources, Energy
Conservation Branch, Edmonton. ENR No. I/17 - No. 5.

### 7.2.6 Repeated Names

When a bibliography or list of references contains entries for works which are by the same author(s), a dash (followed by a period) may be used instead of repeating the name. The dash should be five spaces long. A five-space underline may be used to replace the dash; however, the underline may cause formatting difficulties with the particular word processor or electronic printer being used.

The dash (or underline) replaces ibid by taking the place of as much of the preceding name and title as are identical.

Examples using dash:

Alberta. Energy and Natural Resources. 1984. A Policy for Resource Management of the Eastern Slopes: Revised 1984. Edmonton. ENR Number T/38.

----. Mineral Resources Division. 1984. <u>Current and Historical Oil and Gas Tenure Legislation in Alberta: Working Paper</u>. Edmonton. ENR Dept. Working Paper 1.

----. Resource Evaluation and Planning Division. Resource Planning Branch. 1980. <u>Integrated Resource Plan: Rocky</u> <u>Mountain House Grazing Reserve.</u> Edmonton. ENR No. T/1 - No. 2.

Example using underline.

Alberta. 1984. A Policy for Resource Management of the Eastern Slopes: Revised 1984. Edmonton. ENR No. T/38.

----. Energy and Natural Resources. Mineral Resources
Division. 1984. Current and Historical Oil and Gas
Tenure Legislation in Alberta: Working Paper.
Edmonton. ENR Dept. Working Paper 1.

When a co-author is being added, the preceding name should be repeated in full rather than using the dash.

### Example:

- King, P. 1980. Review of Seed Pretreatments Required for Germination of Candidate Native Tree and Shrub Species in the Eastern Slopes of the Rocky Mountains and Foothills of Alberta. Alberta Energy and Natural Resources, Forest Service, Edmonton. ENR No. 154.
- ----. n.d. "Influence of Grass and Legume Mixtures on Performance of Interplanted Coniferous Trees". Alberta Energy and Natural Resources, Forest Service, Edmonton. Forthcoming.
- King, P., Grainger, G. and A. Straka. 1983. <u>Testing of Seed Pregermination Treatments for Selected Native Shrub Species: Preliminary Phase</u>. Alberta Energy and Natural Resources, Forest Service, Edmonton. ENR No. T/43.

### 7.2.7 Parts of Larger Works

Bibliographical or reference entries for chapters or parts of a book are entered under the name of the author(s) and the title of the chapter or part, followed by "In" and the author, title and publication data for the larger work. The title of the chapter or part should be in quotation marks if that is consistent with the style selected for the bibliography or list of references. Page references are permissible; they immediately follow the title of the larger work.

Examples for parts in larger work with title entry:

"Hunting Ethics". In <u>Alberta Conservation and Hunter</u>
<u>Education</u>. Alberta Energy and Natural Resources, Fish and Wildlife Division, Edmonton. Ref./2 1980.

Schipper, Lee. 1981. "Research Issues in Residential Energy Use in Industrialized Countries". In Energy-Efficient Housing Symposium. Alberta Energy and Natural Resources, Energy Conservation, Edmonton.

Example for parts in larger work with author entry:

"Mallard". 1979. In Weaver, Harold R. and others. Alberta Waterfowl Technical Committee, Special Report 2.

Recovery Distribution from Summer Duck Banding in Alberta:21-43. Alberta Waterfowl Technical Committee, Edmonton.

### 7.2.8 Unpublished Sources

When a source has not been published, a bibliographical or reference entry must give as much information as possible to assist the reader in identifying and locating the material. This rule also applies to divisional or branch reports which have not been released for distribution throughout the department.

In the case of internal reports, a distinction needs to be made between a "departmental report", which is available throughout the department and which would then be considered published, and a divisional or branch report which is restricted in circulation (because of being confidential, a draft document, etc.) and would be considered unpublished.

Depending on the bibliographical or reference style selected, the title of a published report is underlined or italicized; the title of an unpublished report is put in quotation marks. It is permissible to omit the quotation marks but a title is then less easily distinguishable for the reader.

Example for "published" -document (released for internal department use):

Alberta. Energy and Natural Resources. 1984. Policy and Procedures for ENR Information Letters. Edmonton. ENR Report No. Dept. 62. Internal report.

Examples for documents not published and not released for internal department use:

Alberta. "Coal Development Policy for Alberta: Revised 1984". Edmonton. Forthcoming.

Alberta. Energy and Natural Resources. "Alberta Land Information and Mapping". In press.

Hoskin, B. J. 1983. "Catalogue of Wildlife Habitat Mapping Projects in Alberta". Alberta Energy and Natural Resources, Fish and Wildlife Division, Wildlife Habitat Inventory Unit, Edmonton. In-house document.

Stempton, R. D. 1978. "Annual Energy Available from Constant Speed Vertical Axis Wind Turbines". Master's thesis, University of Toronto, Toronto.

#### 7.2.9 Incomplete Data

When a date of publication is not known, the abbreviation "n.d." can be added after the author statement.

#### Example:

Alberta. Energy and Natural Resources. n.d. "Coal Development Policy for Alberta: Revised 1984". Forthcoming.

When a date of publication is missing from the publication but can be supplied from other sources, the date is added in square brackets.

#### Example:

Energy and Chemicals from Wood. [1979]. Alberta Energy and Natural Resources, Edmonton. ENR No. 90.

When the place of publication is missing, its absence may be indicated through the abbreviation "n.p." (no place).

### Example:

Cloven-Hoofed Animals of Alberta. n.d. Alberta Energy and Natural Resources, Fish and Wildlife Division, n.p.

### 7.2.10 Abbreviations

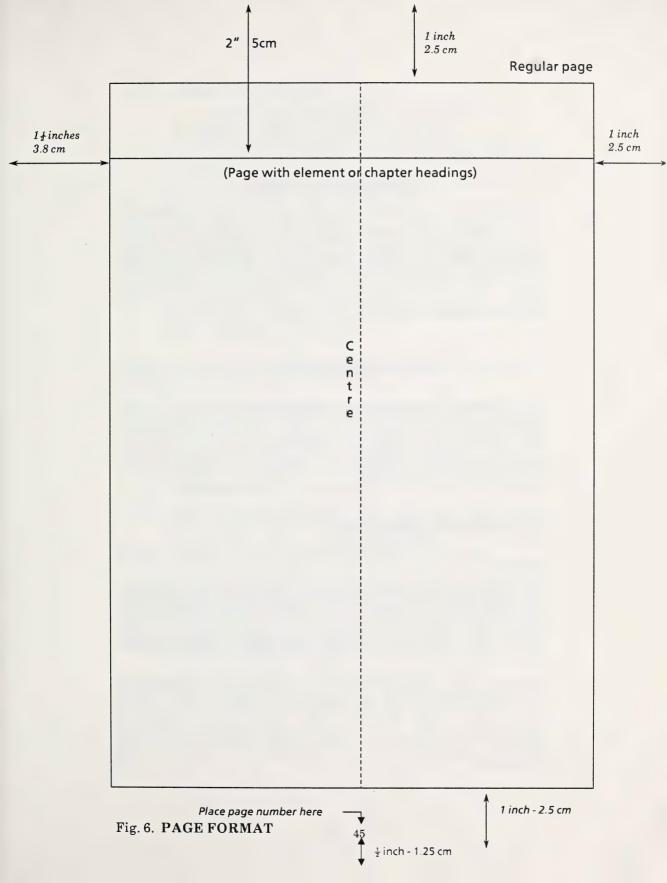
Standard abbreviations may be used in technical bibliographies and reference, within the guidelines outlined in Section 7.2.3. Other traditional abbreviations may also be used (for example, p. and pp. for page and pages; ed. for editor or edited by; comp. for compiler or compiled by; n.d. for no date; n.p., no place).

It is less common today to use Latin forms since few readers are familiar with the language. The following alternatives are preferred:

et al. Although still common, often replaced by "and others".

ibid. Use five-space dash or underline to indicate elements repeated from the preceding entry.

op. cit. The bibliographic data of the previously cited work is either repeated in full; or a shortened form is used in subsequent uses, with a note of explanation accompanying the first citation.



# 8. FINAL STEPS

Whether your publication or internal report is printed inhouse by means of photocopying or is typeset and sent to a printer, you must review your format for consistency. Proofread thoroughly and obtain necessary approvals before proceeding with printing. Ensure your publication or report is recorded with the Editing Section. You will also need to arrange with the Editing Section for copies to be deposited with certain libraries.

# 8.1 Reviewing the Format

Format is both functional (helping to guide the reader through a publication) and esthetic. These qualities are achieved by preventing a crowded appearance and by maintaining consistency. The following guidelines are not inflexible but are intended to provide a standard checklist for formatting. Typists and word-processor operators should strive for consistency in a publication or report rather than a literal interpretation of these guidelines.

# 8.1.1 Format for Regular Pages

Examples for formatting regular pages are given in Figures 5 and 6.

<u>Line Spacing.</u> The decision about spacing between lines depends on the particular font and printer as well as the amount of text, number of headings and length of paragraphs. Reports generally are double spaced, although one-and-a-half spacing may be sufficient. Lists, notes and tabular data are normally single spaced. Most subheadings are preceded and followed by additional lines of space (Figure 1).

Page Numbers. Although exceptions are made, it is customary that all introductory elements, parts, appendices, glossaries and indices are introduced on the right-hand side of the publication and begin on odd numbered pages. The first chapter must begin on a right-hand page; subsequent chapters should, if possible, but may begin on the left. All pages should be counted (blank pages are counted but not numbered).

#### Page number should be:

1. Centred, 1 cm (one-half inch) from bottom of page

2. With no dashes or periods before or after

 In small roman numerals for preliminary material, beginning with ii on the reverse side (verso) of the title page

4. In arabic numerals beginning with the Introduction

<u>Paragraphs</u>. Paragraphs should be indented. A flush-left block style is not customary in publications. Flush-right text is not necessary, and often causes spacing problems with metric symbols.

<u>Long quotations</u>. A quotation which is more than three or four lines long should be run in block form:

1. Introduced with a colon

2. Inset four spaces

- 3. With single-line spacing
- 4. Without quotation marks

<u>Lists</u>. Lists must always use parallel construction (that is, be consistent in structure and punctuation).

A listing of short items can be included right in the text and would appear as:

# Example:

The objectives of the project were: (1) to determine the best water level, (2) to determine why it has not been so maintained, and (3) to rectify the situation.

If there are more than three or four items, they should be inset (that is, given a secondary identation) with a new line for each. Sentence-style capitalization must be used if the items are in sentence form. Punctuation (open, comma, semi-colon or period) depends on the length and structure of each item but must be consistent; final punctuation at the end of the list may be open or closed, depending on the punctuation of the preceding items:

In a list with subdivisions, a hierarchical order is indicated by using numbers, letters and further indentations:

<u>Footnotes</u>. The need for footnotes is examined in Section 6.5; footnotes specifically for tables are discussed in 4.4.4. An example of footnoting is given in Figure 1. A consistent format for footnotes must be maintained throughout a publication:

1. Three lines of space from text

2. Line 20 spaces long, separating footnote from text

 First line indented eight spaces; additional lines to left margin

4. Single spacing between lines

5. Introduced with a superscript number or symbol

6. Appearing on same page footnote is referred to in text

<u>Heading</u>. The need for headings is examined in Sections 6.1 and 6.2; the ENR order or hierarchy of headings is discussed in 4.2. Examples of headings are given in Figures 4 and 5.

### 8.1.2 Format for Title Page

The purpose of the title page is discussed in Section 3.3; a sample title page is given in Figure 7. Title pages should be checked to ensure the following:

### Title.

1. Centred, inverted-pyramid style

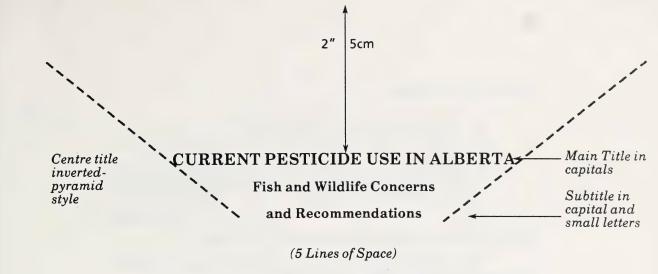
2. Five lines of space between title and author statement
3. Main title all in capitals; subtitle (if any) in upper ar

3. Main title all in capitals; subtitle (if any), in upper and lower case

### Place and Date.

1. Place (e.g., Edmonton) is on line immediately above date

2. Date (generally the year is sufficient) is 2.5 cm (one inch) from left and bottom edges of page.



by L. P. Horstman

1½ inches
3.8 cm

1972
Energy and
Natural Resources
Fish and Wildlife Division

Fig. 7. SAMPLE TITLE PAGE

1 inch
2.5 cm

### Publisher's Statement

1. All publications require Alberta logo.

2. Department name is in upper case.

3. Division (and branch if required) is in upper and lower case.

4. Last element of imprint is on same line as date.

5. One inch of space between publisher's imprint and right and bottom edges of page.

### 8.1.3 Format for Reverse Side (Verso) of Title Page

The contents of the title page verso are discussed in Section 3.4; a sample of a title page verso is given in Figure 8.

1. Publication numbers are listed 5 cm (two inches) from top of page, beginning 3.8 cm (one and a half inches) from left-hand edge.

2. Name, address and telephone number of issuing office may be added to the title page verso, if required.

3. A title page verso is numbered as ii and considered as the second page of a document.

### 8.1.4 Format for Illustrations

Illustrations are reviewed in Section 4.3; a sample illustration is provided in Figure 9.

1. Captions (the description or title appearing under an illustration) may be all upper case or in sentence form (with only the first word and proper nouns capitalized).

2. Captions, unlike titles, end with a period.

3. Figure numbers precede captions. Figures are generally numbered consecutively throughout the text; however, it is permissible to number figures according to the chapter in which they appear.

4. All figure numbers and captions must be same style and

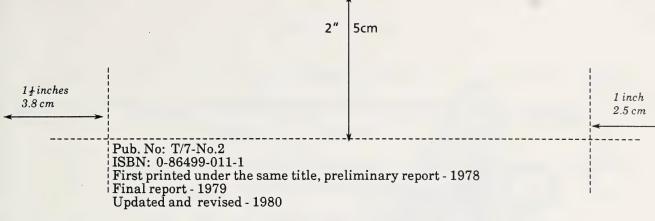
in same place for all figures in the document.

At least one inch of space around illustration.

6. An illustration is placed after (never before) its first reference in the text.

# 8.1.5 Format for Tables

Tables are discussed in Section 4.4; samples are provided in Figures 10, 11 and 12.



### FOR ADDITIONAL COPIES OF THIS REPORT, CONTACT:

Information Centre Alberta Energy Alberta Forestry, Lands and Wildlife Main Floor, Bramalea Building 9920 - 108 Street Edmonton, Alberta, Canada T5K 2M4

Telephone: (403) 427-3590

Other titles in the set include:

T/7-No.1 - Alberta Forests

Copies are no longer available, but the report may be viewed in the Library, 9th Floor, South Petroleum Plaza, 9915 - 108 Street, Edmonton, Alberta.

Fig. 8. SAMPLE VERSO OF TITLE PAGE

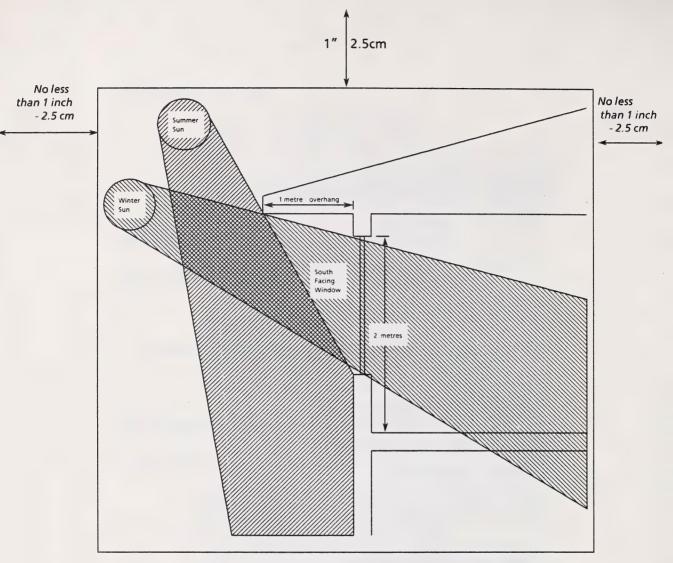


Fig. 26. **OVERHANG FOR LIMITING SUNSHINE**. The overhang should be designed to allow full sun into the window until February 1.

SOURCE: Adapted from Alberta Energy and Natural Resources, Energy Conservation Branch 1980.

Fig. 9. **SAMPLE ILLUSTRATION**. When there is a legend, scale or key, it must appear within the drawn border. Only the caption and credit line appear below -- note the format used.

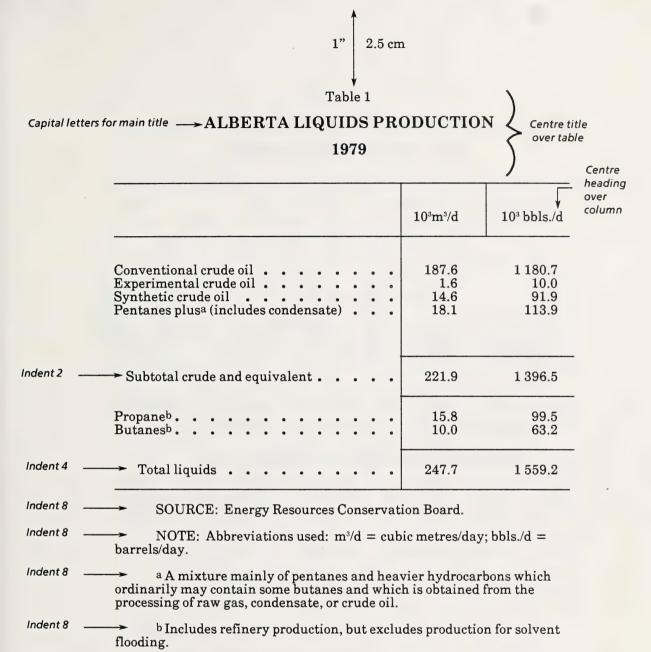


Fig. 10. SAMPLE TABLE

Table 2

LAND OWNERSHIP ACQUIRED BY

FOREIGNERS: 1979/80

	Area			P	Area
	ha	a.	← Double Rule	ha	a.
April May June July August September October	83 87 24 338 276 299 12	205 218 60 839 684 742 29	November December January February	17 164 265 391 619	43 407 659 970 1 536

SOURCE: Foreign Ownership of Land Administration

NOTE: Abbreviations used: ha = hectare; a. = acre

Fig. 11. **SAMPLE TABLE**. Long, narrow tables can be split and presented side-by-side by using a double rule down the centre.

Table 3

SALES OF PETROLEUM AND NATURAL GAS RIGHTS

January 1, 1980 - May 31, 1980

	AREA SOLD		BONUS	AVERAGE PRICE	
	ha	a.	\$	\$/ha	\$/a.
	LICENCE SALES				
Plains Northern Foothills	164 968 625 206 110 993	412 420 1 563 015 277 483	71 053 688 229 196 739 104 004 923	430.71 366.59 937.04	172.28 146.64 374.82
Subtotal	901 167	2 252 918	404 255 350	448.59	179.44
	LEASE SALES				
Plains Northern Foothills	119 386 111 979 11 952	298 465 279 948 29 880	43 935 881 68 594 593 16 362 879	368.02 612.57 1369.05	147.21 245.03 547.62
Subtotal	243 317	608 293	128 893 353	529.73	211.89
Total	1 144 484	2 861 211	533 148 703	465.84	186.34

SOURCE: Resource Information Services

NOTE: Sale figures are unaudited

Fig. 12. SAMPLE TABLE. Spanner headings can be used to avoid repeating box headings.

1. All tables must be numbered; the table number precedes the table title. Tables are generally numbered consecutively throughout a document; however, it is permissible to number tables according to the chapter in which they appear.

2. Titles are all upper case.

3. Column headings, stub data and column information must be consistent in capitalization and sentence style within each table as well as for all tables in the same publication.

4. At least 2.5 cm (one inch) of space around table.

5. A table is placed after (never before) its first reference in the text.

# 8.2 Approvals

Responsibility for obtaining the necessary approvals before proceeding to printing rests with the issuing branch or section. This approval will involve expenditure authorization as well as authorization to proceed with printing and distribution. The approval process may vary with division and sector. Certain divisions (such as the Forest Service and Fish and Wildlife) have an extension services branch which is responsible for co-ordinating all printing and publishing.

Printing and art work being done outside the department fall under the mandate of the Public Affairs Bureau. In such cases, as well as publication and cover designs ("concepts") and communications planning, the issuing branch or section will find it useful to consult ahead of time with the Public Affairs officer assigned. Such consultation may also need to be made through a division's extension services branch: for example, the Alberta Forest Service Extension Services controls all phases of their publications.

Concepts and art work, as well as proofs (Section 8.4) require the approval of the issuing branch or section and generally are signed or initialled by the approving authority. Concepts may be an artist's sketch of the proposed design and layout for a publication, with the lines of print indicated by lines of color; or they may involve pages of typed copy using fragments of Latin but which sometimes is referred to as "Greeking" (Figure 13).

### INTRODUCTION

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Fig. 13. EXAMPLE OF "GREEKING". Fragments of Latin are sometimes used by designers to indicate the format and type style of a publication they are designing.

# 8.3 Editing

It is the policy of the departments that all publications are edited by the Editing Section. This provides an opportunity for the manuscript to be reviewed in its final stages for consistency, spelling and grammar, as well as for format and style. The editors also use the opportunity to point out problems with the manuscript's clarity and presentation.

The Editing Section is responsible too for assigning publication numbers and recording all department publications and internal reports. This record of publications data can be consulted at the Editing Section office, the Information Centre and the department library.

Committee and joint publications or reports involving Energy/Forestry, Lands and Wildlife and other government departments or non-government organizations should also be recorded by the Editing Section and appropriate publication numbers assigned.

# 8.4 Proofreading

Proofreading involves checking a printer's or typist's copy with the original manuscript to ensure that typographical errors are eliminated and that the original has been accurately reproduced. Page proofs also offer a useful opportunity to check that a publication's format is correct.

Printers generally supply two proofs: the first, known as a blackline, is a preliminary version. Blackline proofs may be columns of copy without pages or format, or they may be page proofs. The final version, the blueline, is a photographic reproduction of exactly how the printed version will appear. Corrections to bluelines should be minimal -- delays and changes in this stage of printing are costly and difficult.

Although it is always the right of the branch or section to request another proof from the printer or typesetter in order to ensure that all corrections have been made, it must also be remembered that every proof is an additional cost. A proof should be initialled before being returned to the printer in order to show that the changes are authorized. It is also recommended that the issuing branch or section keep photocopies of corrected proofs.

Editors, proofreaders and printers generally use a number of symbols to indicate changes or corrections to copy (Table 3). The responsibility for proofreading belongs to the issuing branch or section, not to the Editing Section.

#### Table 3

#### PROOFREADING

Proofreading involves comparing a new version of type or copy with an older version of the same material and catching and marking the errors in the new version.

Reading over the newest version without comparing it to the older one is seldom good enough. The new version might make sense but paragraphs may be missing or sentences misplaced.

The important things in proofreading are (1) catching the errors, and (2) marking the errors so the person who must correct them will understand what to do.

- 1. You need to make proofreading marks directly on the latest version of the material. However, do not mark an original that cannot be replaced. Mark only carbon copies, photocopies or print-outs (such as from a word processor). If you have the only original of something, get a copy made before you mark.
- 2. Proofreading fails if your handwriting or your marks will be misread. If anyone has ever complained that your handwriting is hard to read, you must print.
- 3. It is preferable to make two marks for every correction, one right in the line of type (the text) and one in the margin.

There are good reasons for marking in pairs:

- It is hard for the person making the corrections to search an entire page for tiny in-text marks and changes; they are easy to overlook. The mark in the margin shows at a glance that there is a problem and the mark in the text pinpoints the problem.
- Most material to be proofread does not have enough room for writing between the lines.
- Marking in pairs is the traditional system; most professional proofreaders and typesetters understand it.
- 4. A ring around a mark in the margin means "Follow these instructions but don't type or typeset letters that appear in the ring."

(Continued on next page)

# Table 3 (continued)

$\wedge$	insert	see 1/o	see layout
#	add space	no¶	no paragraph
	close up	lf	light face
$\sim$	transposed letters	bf	bold face
₽hil l.c.	lower case	(sp)	spell out
$\underline{\underline{p}}$ hil u.c.	upper case		
Caps	caps		
	underlined		
stet	keep as it was		
29	delete or omit		
$\odot$	circle to ensure small error is seen		
¶	paragraph		
$\odot$	period	٠	
<b>∵</b> ∕	colon		
*	apostrophe		
<b>""</b> "	quotes		
$\overline{\wedge}$ or $=$	hyphen		
<b>√</b> 2	superior character		
$\stackrel{\wedge}{\sim}$	inferior character		
fl L	flush left		
flR	flush right		
I	align vertically		
~5	same line		

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<sup>&</sup>lt;sup>a</sup>These materials are available from the Editing Section, Edmonton.



